

REMARKS/ARGUMENTS

Applicant has reviewed and considered the Office Action mailed on June 3, 2005, and the references cited therewith.

Claims 3, 7, 8, 11-13, and 17-19 are amended. Claims 1-19 are pending in this application. Applicant respectfully submits that the amendments to claims 3, 7, 8, 11-13, and 17-19 do not introduce any new subject matter and are intended to cover claimable subject matter fully supported by the originally filed specification. In addition, the amendments to claims 3, 7, 8, 11-13, and 17-19 were directed to addressing rejections based on 35 U.S.C. 112 second paragraph, and not in response to any document of record.

Specification

The Office Action provided that the disclosure was objected to because on page 19, line 19 the specification read "user interface 95." As suggested in the Office Action, Applicant has amended this portion of the paragraph to read "user interface 96." Applicant respectfully submits that no new matter was added by this amendment. Applicant respectfully requests consideration and acceptance of the replacement paragraph.

Drawings

The Office Action provided that the drawing were objected to as failing to comply with 37 CFR 1.84(p)(5) because element 96 in Fig. 10 was not mentioned in the description. Applicant has amended the description to provide "user interface 96." As such, the reference character 96 is now mentioned in the specification. Applicant respectfully requests consideration and acceptance of the figures.

§112 Rejection of the Claims

Claims 3, 8-19 were rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

For claim 3 it was asserted that it was unclear what the abbreviation "DICOM" represented. Applicant has amended claim 3 to more clearly recite what the abbreviation "DICOM" represents.

For claim 8 it was asserted that the phrase "the network communication" lacked antecedent basis. Applicant has amended claim 8 to more clearly recite the claimed subject matter.

For claim 11 it was asserted that the phrase "in part" was unclear. Applicant has amended claim 11 to more clearly recite the claimed subject matter.

For claim 13 it was asserted that the phrases "the network communication" and "the AENaame defined within the routing information" lacked antecedent basis. Applicant has amended claim 13 to more clearly recite the claimed subject matter.

For claim 17 it was asserted that the phrases "the corrected medical imaging" lacked antecedent basis. Applicant has amended claim 17 to more clearly recite the claimed subject matter.

For claim 18 it was asserted that the phrase "based on the asset media information to the routing information" was unclear. Applicant has amended claim 18 to more clearly recite the claimed subject matter.

Applicant respectfully requests reconsideration and allowance of claims 3 and 8-19.

§103 Rejection of the Claims

Claims 1, 2, 8-13, 18-19 were rejected under 35 USC §103(a) as being unpatentable over Schnellinger, et al. (U.S. Patent No. 5,642,513).

Claims 3, 17 were rejected under 35 USC §103(a) as being unpatentable over Schnellinger, et al. (U.S. Patent No. 5,642,513), as applied to claims 1, 12 above, and further in view of Pourjavid (U.S. Patent No. 5,883,985).

Claims 6, 16 were rejected under 35 USC §103(a) as being unpatentable over Schnellinger, et al. (U.S. Patent No. 5,642,513), as applied to claims 1, 11 above, and further in view of DeLaHuerga (U.S. Patent Publ.2002/0116509).

Claims 4, 5, 14, 15 were rejected under 35 USC §103(a) as being unpatentable over Schnellinger, et al. (U.S. Patent No. 5,642,513), as applied to claims 1, 11 above, and further in view of Zandi, et al. (U.S. Patent No. 6,195,465).

Claims 7 was rejected under 35 USC §103(a) as being unpatentable over Schnellinger, et al. (U.S. Patent No. 5,642,513), as applied to claim 1 above, and further in view of Booth, et al. (U.S. Patent No. 6,065,073).

Applicant respectfully traverses the rejections as follows.

Claim 1

Applicant respectfully submits that Schnellinger does not support a proper *prima facie* case of obviousness for the rejection of claim 1. For example, Schnellinger does not teach or suggest all the elements recited in claim 1.

Applicant's independent claim 1 recites, besides other things, a computer-readable medium having a storage asset therein that includes a fourth data structure that stores patch data that includes modifications to the medical imaging information. As provided by the Applicant, and as recited in claim 1, the patch data that includes modifications to the medical imaging information:

includes all modifications to medical imaging information 87B, which was originally generated by the source modality. In other words, the original data is not modified. Rather, the asset includes patch data 87E that stores all of the updated data and, in particular, a revision history including the date and time of the change, and operator that made the change. In other words, during the reconciliation process, patient manager 48 stores all updates and modifications of an asset within the patch data 87E of the exchange format 86. In this manner, exchange format 86 facilitates compliance with regulations that require change tracking and revision histories and furthermore, facilitates storages of the information within a single self-describing data asset. When a view station presents the data to an operator, patch data 87E overrides the medical imaging 87B. However, the operator may always view the revision history and the original medical imaging data 87B. (page 15, line 24 – page 16, line 5).

In contrast, Schnellinger provides "[t]he MIG [Medical Imaging Gateway] also provides for compression/expansion of data, communication control, temporary storage, and security/error checking" for medical images (Col. 5, lines 25-26), and that "Image Images can be captured (acquired from the source modality), stored (locally, or remotely) temporarily for a short time or archived for a long time),

retrieved from local or remote storage, viewed, previewed, adjusted, manipulated, and composed" (Col. 11, lines 46-50). Schnellinger, however, does not teach or suggest what type of security/error checking takes place for the medical images in the MIG. In addition, Schnellinger does not teach or suggest what is included when the "Image Images" are "viewed, previewed, adjusted, manipulated, and composed." In other words, Applicant is unable to find in Schnellinger where the "MIG" and/or the "Image Images" includes patch data having modifications to the medical imaging information that was originally generated by the source modality and a revision history including the date and time of a change, and the operator that made the change to the medical imaging information.

As such, each and every element and limitation are not provided in the reference to support a §103 rejection of claim 1.

In addition, Applicant respectfully submits that it appears the Examiner is relying upon an inherency argument in rejecting claim 1. As is appreciated, the express, implicit, and inherent disclosures of a prior art reference may be relied upon in the rejection of claims under 35 U.S.C. 102 or 103. However, "[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." M.P.E.P. 2112, Sec. IV. Rather "[t]o establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" M.P.E.P. 2112, Sec. IV. "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." M.P.E.P. 2112, Sec. IV.

Applicant respectfully submits that the Examiner has not provided a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from Schnellinger. The Examiner asserts that the system of Schnellinger includes security and error checking function,

and that image information can be previewed, adjusted, manipulated and composed. The Examiner then concluded that "it is readily apparent that data structures for patch data and error detecting/correcting are necessary for carrying these functions" (page 4, Office Action). As discussed above, however, these functions for the "patch data" include all modifications to medical imaging information that was originally generated by the source modality, including storing all of the updated data and, in particular, a revision history including the date and time of the change, and operator that made the change. Schnellinger does not teach or suggest this aspect of the "patch data." In addition, the Examiner has not provided objective evidence or cogent technical reasoning as to where and/or how Schnellinger provides support for the conclusion of inherency.

Accordingly, reconsideration and withdrawal of the §103 rejection for independent claim 1 are respectfully requested.

Claims 2-7

As discussed above for claim 1, Schnellinger does not teach or suggest patch data having modifications to the medical imaging information that was originally generated by the source modality and a revision history including the date and time of a change, and the operator that made the change to the medical imaging information. As such, each and every element of independent claim 1 is not taught or suggested in Schnellinger. As claim 2 is a dependent claim of independent claim 1, the §103 rejection of claim 2 should be withdrawn.

As for claim 3, the Examiner cited Pourjavid to illustrate DICOM communication protocol standards. Pourjavid, however, does not cure the above identified deficiencies of Schnellinger. As such, each and every element of independent claim 1 is not taught or suggested in Schnellinger and Pourjavid, either independently or in combination. As claim 3 is a dependent claim of independent claim 1, the §103 rejection of claim 3 should be withdrawn.

For claims 4, 5, the Examiner cited Zandi, to illustrate a compression and decompression system. Zandi, however, does not cure the above identified deficiencies of Schnellinger. As such, each and every element of independent claim

1 is not taught or suggested in Schnellinger and Zandi, either independently or in combination. As claims 4 and 5 are dependent claims of independent claim 1, the §103 rejection of claims 4 and 5 should be withdrawn.

For claim 6, the Examiner cited DeLaHuerga to illustrate at least a time stamp. DeLaHuerga, however, does not cure the above identified deficiencies of Schnellinger. As such, each and every element of independent claim 1 is not taught or suggested in Schnellinger and DeLaHuerga, either independently or in combination. As claim 6 is a dependent claim of independent claim 1, the §103 rejection of claim 6 should be withdrawn.

For claim 7, the Examiner cited Booth to illustrate at least a cyclical redundancy check. Booth, however, does not cure the above identified deficiencies of Schnellinger. As such, each and every element of independent claim 1 is not taught or suggested in Schnellinger and Booth, either independently or in combination. As claim 7 is a dependent claim of independent claim 1, the §103 rejection of claim 7 should be withdrawn.

The rejection of claims 2-7 under 35 USC § 103(a) has been overcome and should be withdrawn. Reconsideration and withdrawal of the §103 rejection for claims 2-7 are respectfully requested.

Claim 8

Applicant respectfully submits that Schnellinger does not support a proper *prima facie* case of obviousness for the rejection of claim 8. For example, Schnellinger does not teach or suggested all the elements recited in claim 8. Applicant's independent claim 8 recites, besides other things, a method that includes receiving a storage asset comprising: (i) asset meta information, (ii) original medical imaging information received from a medical imaging modality, and (iii) patch data that includes modifications to the medical imaging information. As discussed above for claim 1, Applicant is unable to find in Schnellinger a teaching or suggestion of patch data having modifications to the medical imaging information that was originally generated by the source modality and a revision history including the date and time of a change, and the operator that made the change to the medical imaging

information. As such, each and every element and limitation are not provided in the reference to support a §103 rejection of claim 8.

In addition, the Examiner asserts that while Schnellinger "does not expressly recite the receiving of data structures that store patch data including modifications to the medical imaging information" Schnellinger does teach "on col. 11, lines 46-50 that image information can be stored, retrieved, previewed, adjusted, manipulated and composed." Based on this, the Examiner asserts that "it is readily apparent that the receiving of stored patch data including modifications to the medical imaging information is necessary for retrieving, adjusting, manipulating or composing the image information." (page 5, Office Action).

As with the rejection of claim 1, it appears that the Examiner is relying upon an inherency argument in rejecting claim 8. However, Applicant respectfully submits that the Examiner has not sufficiently supported the inherency argument relied upon in rejecting claim 8. For example, the Examiner has not provided a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from Schnellinger. Applicant respectfully repeats the argument presented above for claim 1 in support of this position.

Accordingly, reconsideration and withdrawal of the §103 rejection for independent claim 8 are respectfully requested.

Claims 9-17

As discussed above for claim 8, Schnellinger does not teach or suggest patch data having modifications to the medical imaging information that was originally generated by the source modality and a revision history including the date and time of a change, and the operator that made the change to the medical imaging information. As such, each and every element of independent claim 8 is not taught or suggested in Schnellinger. As claims 9-13 are dependent claims of independent claim 8, the §103 rejection of claims 9-13 should be withdrawn.

For claims 14, 15, the Examiner cited Zandi, to illustrate a compression and decompression system. Zandi, however, does not cure the above identified deficiencies of Schnellinger. As such, each and every element of independent claim 8 is not taught or suggested in Schnellinger and Zandi, either independently or in combination. As claims 14 and 15 are dependent claims of independent claim 8, the §103 rejection of claims 14 and 15 should be withdrawn.

For claim 16, the Examiner cited DeLaHuerga to illustrate at least a time stamp. DeLaHuerga, however, does not cure the above identified deficiencies of Schnellinger. As such, each and every element of independent claim 8 is not taught or suggested in Schnellinger and DeLaHuerga, either independently or in combination. As claim 16 is a dependent claim of independent claim 8, the §103 rejection of claim 16 should be withdrawn.

As for claim 17, the Examiner cited Pourjavid to illustrate DICOM communication protocol standards. Pourjavid, however, does not cure the above identified deficiencies of Schnellinger. As such, each and every element of independent claim 8 is not taught or suggested in Schnellinger and Pourjavid, either independently or in combination. As claim 17 is a dependent claim of independent claim 8, the §103 rejection of claim 17 should be withdrawn.

The rejection of claims 9-17 under 35 USC § 103(a) has been overcome and should be withdrawn. Reconsideration and withdrawal of the §103 rejection for claims 9-17 are respectfully requested.

Claim 18

Applicant respectfully submits that Schnellinger does not support a proper *prima facie* case of obviousness for the rejection of claim 18. For example, Schnellinger does not teach or suggested all the elements recited in claim 18. Applicant's independent claim 18 recites, besides other things, a router that includes a routing module to route a storage asset comprising: (i) asset meta information, (ii) original medical imaging information received from a medical imaging modality, and (iii) patch data that includes modifications to the medical imaging information. As discussed above for claim 1, Applicant is unable to find in

Schnellinger a teaching or suggestion of patch data having modifications to the medical imaging information that was originally generated by the source modality and a revision history including the date and time of a change, and the operator that made the change to the medical imaging information. As such, each and every element and limitation are not provided in the reference to support a §103 rejection of claim 18.

In addition, the Examiner asserts that while Schnellinger "does not expressly recite the patch data including modifications to the medical imaging information" Schnellinger does teach "on col. 11, lines 46-50 that image information can be stored, retrieved, previewed, adjusted, manipulated and composed." Based on this, the Examiner asserts that "it is readily apparent that the receiving of stored patch data including modifications to the medical imaging information is necessary for retrieving, adjusting, manipulating or composing the image information." (pages 6-7, Office Action).

As with the rejection of claim 1, it appears that the Examiner is relying upon an inherency argument in rejecting claim 18. However, Applicant respectfully submits that the Examiner has not sufficiently supported the inherency argument relied upon in rejecting claim 18. For example, the Examiner has not provided a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from Schnellinger. Applicant respectfully repeats the argument presented above for claim 1 in support of this position.

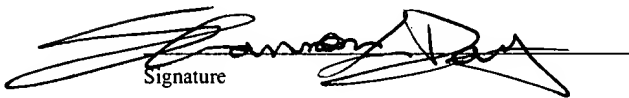
Accordingly, reconsideration and withdrawal of the §103 rejection for independent claim 18, as well as claims which depend therefrom, are respectfully requested. Claim 19 is a dependent claim upon independent claim 18. Accordingly, Applicant asserts that claim 19 is deemed allowable upon the basis discussed above.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 236-0122 to facilitate prosecution of this matter.

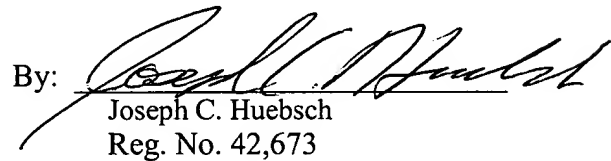
CERTIFICATE UNDER 37 CFR §1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: **MS AMENDMENT** Commissioner of Patents, P.O. BOX 1450, Alexandria, VA 22313-1450 on this 2nd day of September, 2005.

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